FIG. 1a

FIG. 1b

```
ATGGGAGCCGGAGGACGCATGTCTGATCCAACAACGAAAGACGAACAAAAGAAGAACCCC
  M  G  A  G  G  R  M  S  D  P  T  T  K  D  E  Q  K  K  N  P
CTCCAACGGGTGCCTTACGCAAAGCCTCCATTGACACTCGGTGACATCAAGAAGGCCATT
  L  Q  R  V  P  Y  A  K  P  P  F  T  L  G  D  I  K  K  A  I
CCACCACACTGCTTCGAGAGATCCGTCAGCCGTTCGTTCTCCTATGTCGTTACGATCTC
  P  P  H  C  F  E  R  S  V  S  R  S  F  S  Y  V  V  Y  D  L
GTCATTGTTTTCCTTCTCTACTAGATTGCGAGTTCTTACTTCCATCTGCTGCCATCCCCA
  V  I  V  F  L  L  Y  Y  I  A  T  S  Y  F  H  L  L  P  S  P
TACTGCTACCTAGCTTGGCCCATTTACTGGGGTGTACAAGGGTGCGTTTGCACCGGAATC
  Y  C  Y  L  A  H  P  I  Y  H  V  Q  G  C  V  C  T  G  I
TGGGTCATTGCCCATGAATGTGGCCACCATGCATTCAGCGATTACCAGTGGCTTGACGAC
  W  V  I  A  H  E  C  G  H  H  A  F  S  D  Y  Q  W  L  D  D
ACAGTTGGCCTCATCCTGCACTCTGCCCTGCTCGTGCCCTATTTCTCATGGAAATACAGC
  T  V  G  L  I  L  H  S  A  L  L  V  P  Y  F  S  W  K  Y  S
CACCGCCGCCACCACTCCAACACTGGATCCCTTGAGCGTGACGAAGTCTTCGTCCCAAAG
  H  R  R  H  H  S  N  T  G  S  L  E  R  D  E  V  F  V  P  K
CCAAAATCCAGAGTCTCGTGGTACTCCAAATACTTGAACAATCCACTTGGCAGAGTCATC
  P  K  S  R  V  S  W  Y  S  K  Y  L  N  N  P  L  G  R  V  I
ACACTTGTGGTTACTCTTACTCTCGGTTGGCCTCTATACTTGCTGTTTAATGTCTCTGGC
  T  L  V  V  T  L  T  L  G  W  P  L  Y  L  L  F  N  V  S  G
AGGCCTTACAACCGTTTTGCATGCCACTTTGACCCATATGGTCCAATATATAATGACCGT
  R  P  Y  N  R  F  A  C  H  F  D  P  Y  G  P  I  Y  N  D  R
GAGAGACTTCAAATCTTCATCTCCGATGCTGGTATAATTGCTGCTGTATGTGTGCTTTAT
  E  R  L  Q  I  F  I  S  D  A  G  I  I  A  A  V  C  V  L  Y
CGTGTTGCTTTGGTCAAAGGGTTGGCTTGGCTGGTATGTGTTTATGGGGTAGCGTTACTC
  R  V  A  L  V  K  G  L  A  W  L  V  C  V  Y  G  V  P  L  L
ATTGTCAACGGTTTCCTTGTTTTGATCACATTCCTTCAGCACACTCAGCCTTCGTTGCCG
  I  V  N  G  F  L  V  L  I  T  F  L  Q  H  T  H  P  S  L  P
CACTATGATTCTTCCGAGTGGGACTGGCTAAGGGGAGCTGTTGCAACTGTCGACAGAGAT
  H  Y  D  S  S  E  W  D  W  L  R  G  A  L  A  T  V  D  R  D
TATGGGGTGCTAAATAAGGTGTTCCATAACATCACAGATACGCACGTGACTCACCACCTT
  Y  G  V  L  N  K  V  F  H  N  I  T  D  T  H  V  T  H  H  L
TTCTCAACGATGCCACATTACCATGCAATGGAGGCAACTAAGGCAATCAAGCCCATACTG
  F  S  T  M  P  H  Y  H  A  M  E  A  T  K  A  I  K  P  I  L
GGCCAGTATTATCAGTTTGATGGAACCCCGTTTTACAAGGCGATGTGGAGGGAGGCAAAG
  G  Q  Y  Y  Q  F  D  G  T  P  F  Y  K  A  M  W  R  E  A  K
GAATGTCTGTATGTCGAGCCAGACGAGAGTACTCCAGACAAGGGTGTATTCTGGTACAAG
  E  C  L  Y  V  E  P  D  E  S  T  P  D  K  G  V  F  W  Y  K
```

FIG. 1c

```
AACAAGTTCTGAAGCCGAATAACATGTGGTTAGTGAAAATGGCGTCTTCTTATTTTGTCC
 N   K   F   -
TATGGAGATGGAGGAACATCATCATGTTTTGTTTTTCTTCTTATAAGATGCGTCCTTTGT
TAGTGTATTCTCTGCATGTAATAAAATAAACTTCTACCCGAAACCTTGTCTGTGCTGGTC
CGATTCTAGTTCTGCAATAAATTGTCAAGTTTAGTG
```
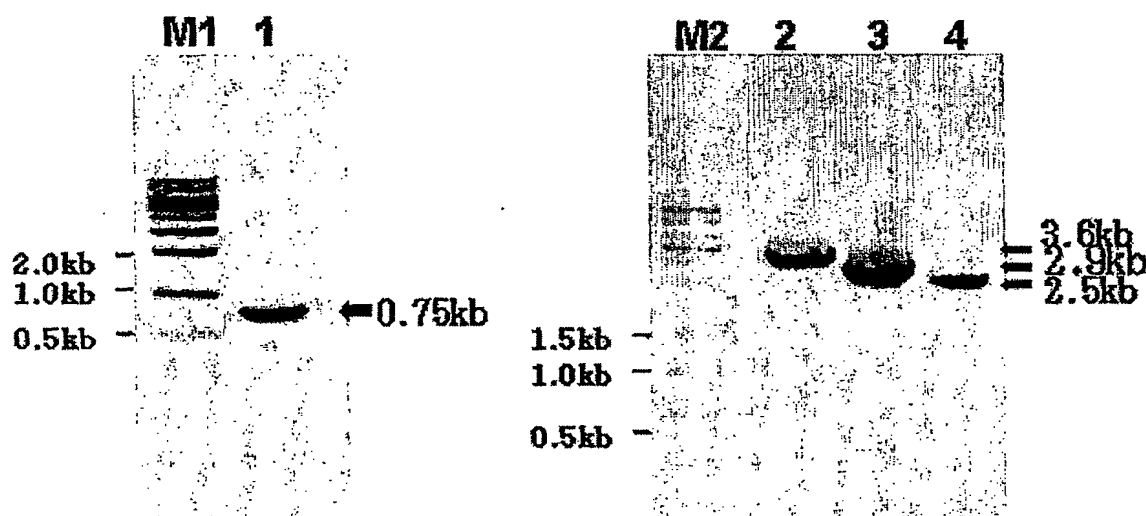
FIG. 2a

FIG. 2b

FIG. 3

CATATGTGAAATGTAATGGAAAATGCGACAAGAATTGCAATAGAGAAAATCCAATTTGCAGAGATTA
CATGAAAAGAATTTGTACAAATAGCATATATATGTTAAAATGAAATGGGACATGCCACATTATGTGG
AATAAAAAAGACAATTTGCTTGGAATTAATTATAGAATAAATGTGTTACATTTAATATGTGATTAAT
CACTTTTTTTTGAATTGTACATCTATCACATGACAAGTTCATTATATTTGACATATAATTTGTTTATG
TCTAGTCAAGCCTAATTAAATTTCTCGGAAAGCACAAAATTTTTTTGTCCTAACCAGGTTTGAACAA
CCAAACAAATCACAAAGCAGGTGTATCGCACTTGCGATGTGATCGGTCACTTTTTTCTAAATTGTACA
TCATTCACACGACAACTGTATTGTGCTCCAAGTTCAATTGAGTGCGGTTGGAGCTATAATTTCCTTG
AACACACAATGTGGAATGTGCACACTCCATGTGGGCCAATGAGCGGATGACACGTGGCGGGCAACTT
ACCTCGTTACGTTGAGGCATGCATGAAAGGGGGATCTCTTGAGGTGGAGGGGTGGGGGCGGGGGTTG
GGGGGGGGCCCCTCCTCAGACAGGTCTATATTTATGAGACCTCGTAAGGCAGAACGC
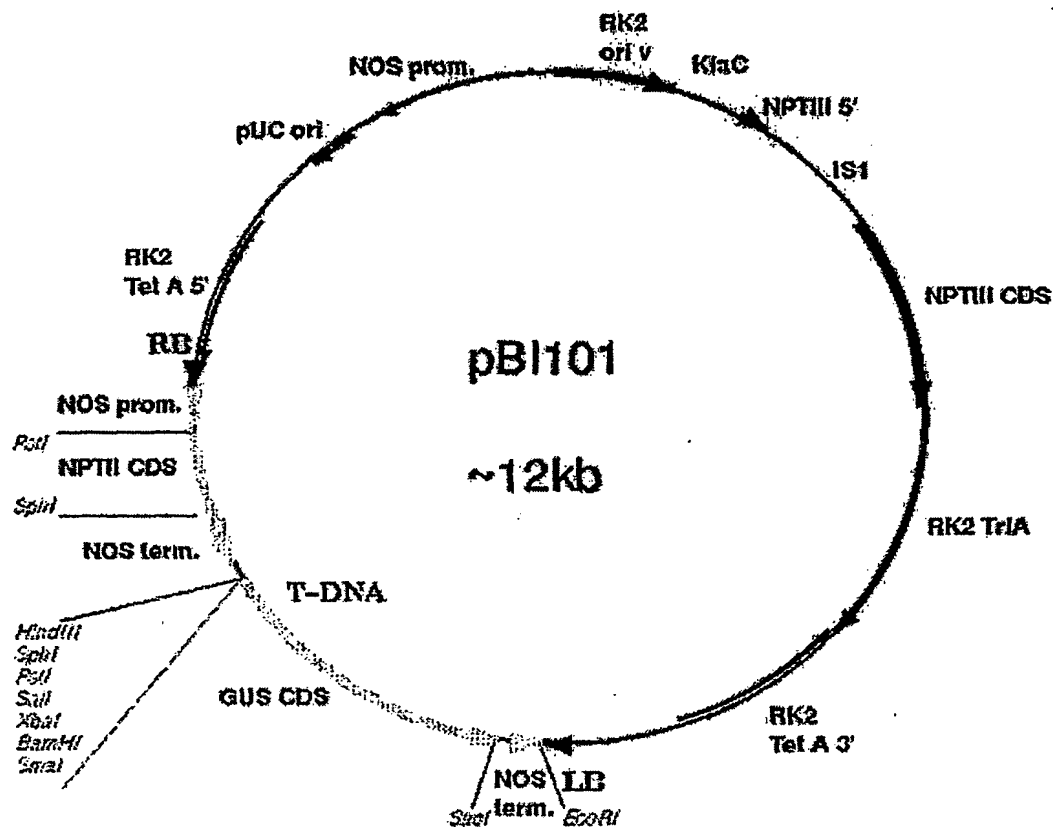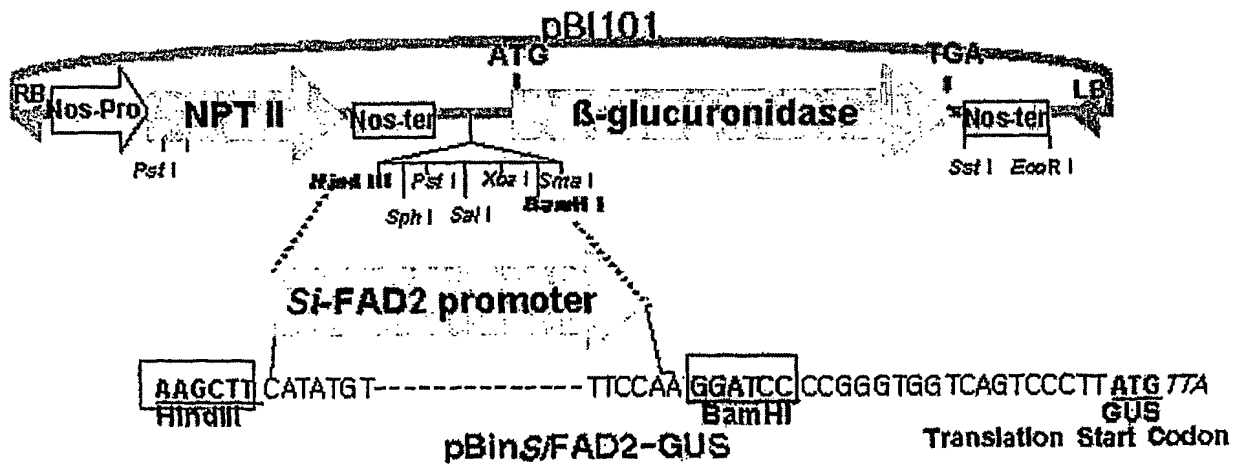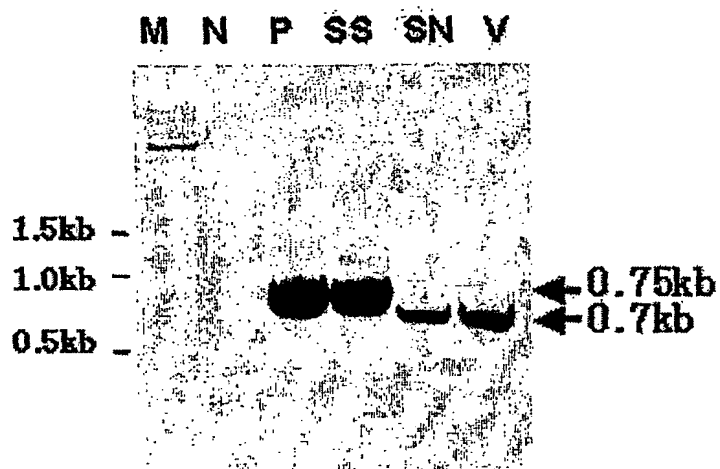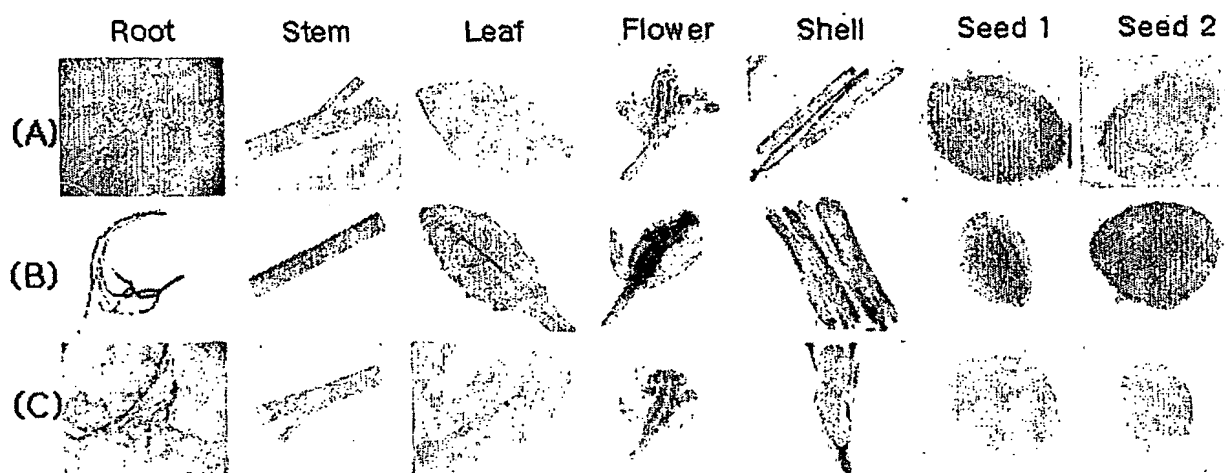
FIG. 4a

FIG. 4b

FIG. 4c

FIG. 5

FIG. 6

Root	Stem	Leaf	Flower	Shell	Seed 1	Seed 2

(A)

(B)

(C)

FIG. 7a
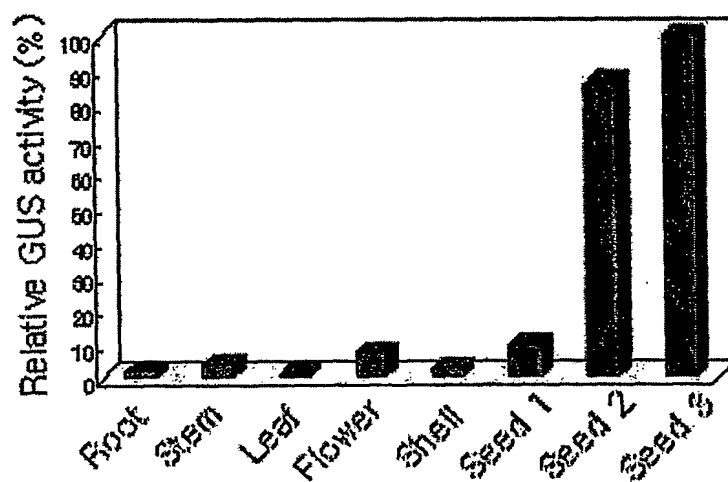
FIG. 7b
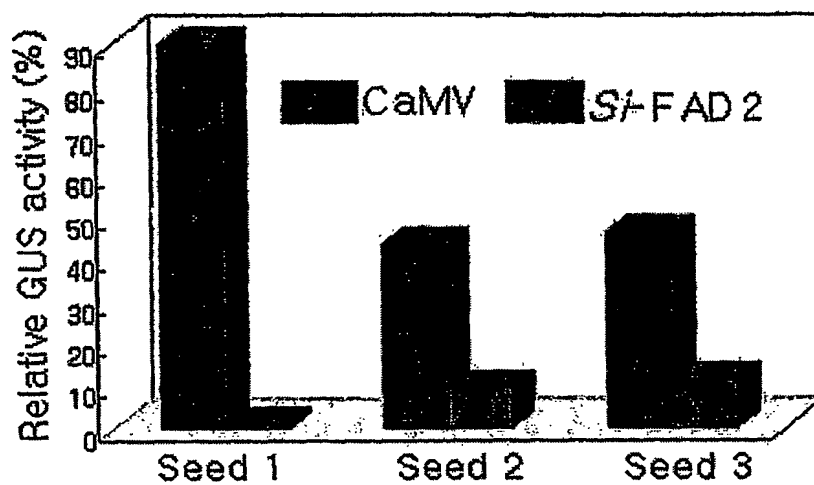
FIG. 8a
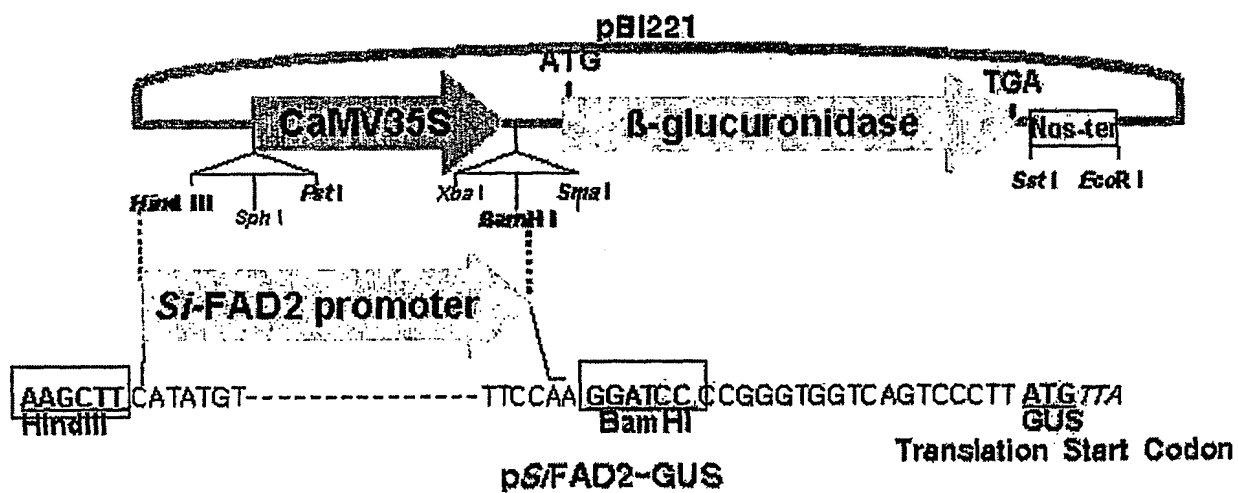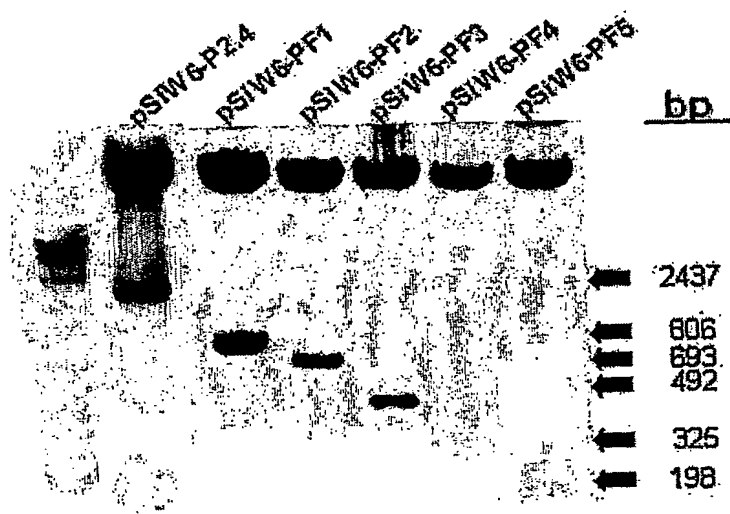
FIG. 8b
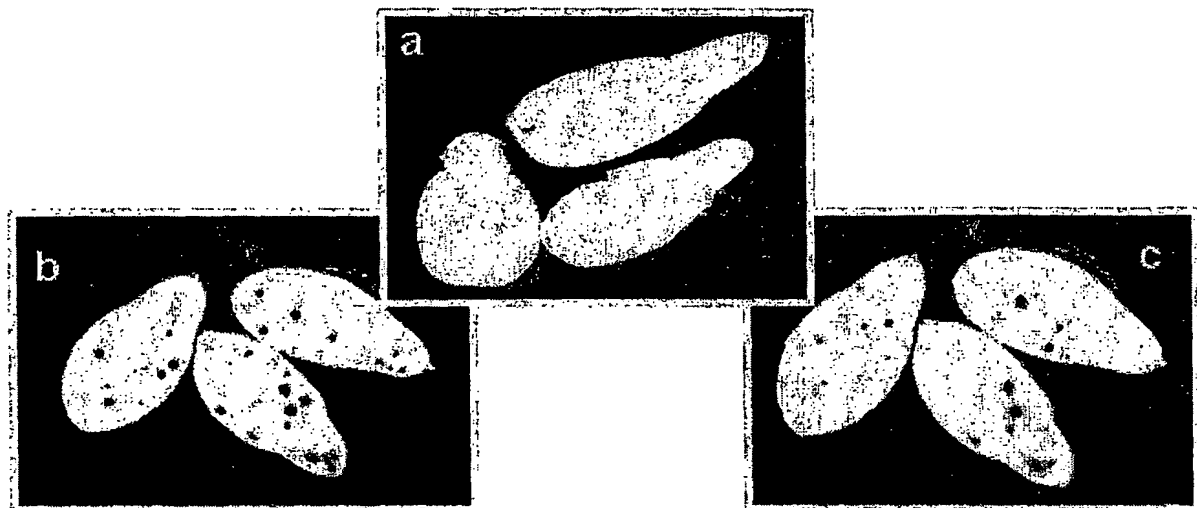
FIG. 9a
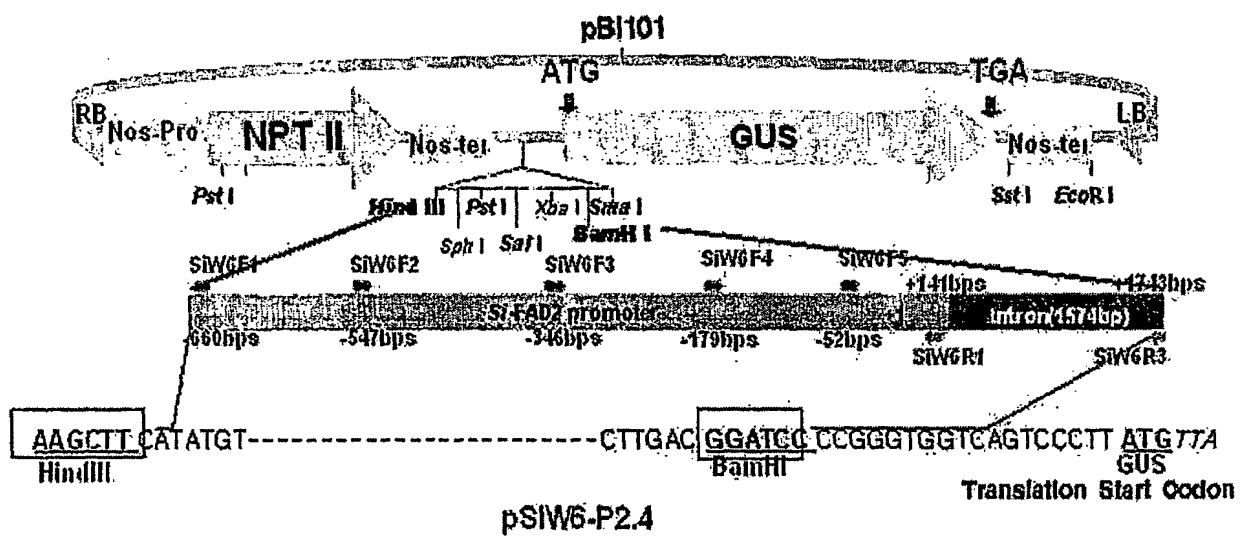
FIG. 9b
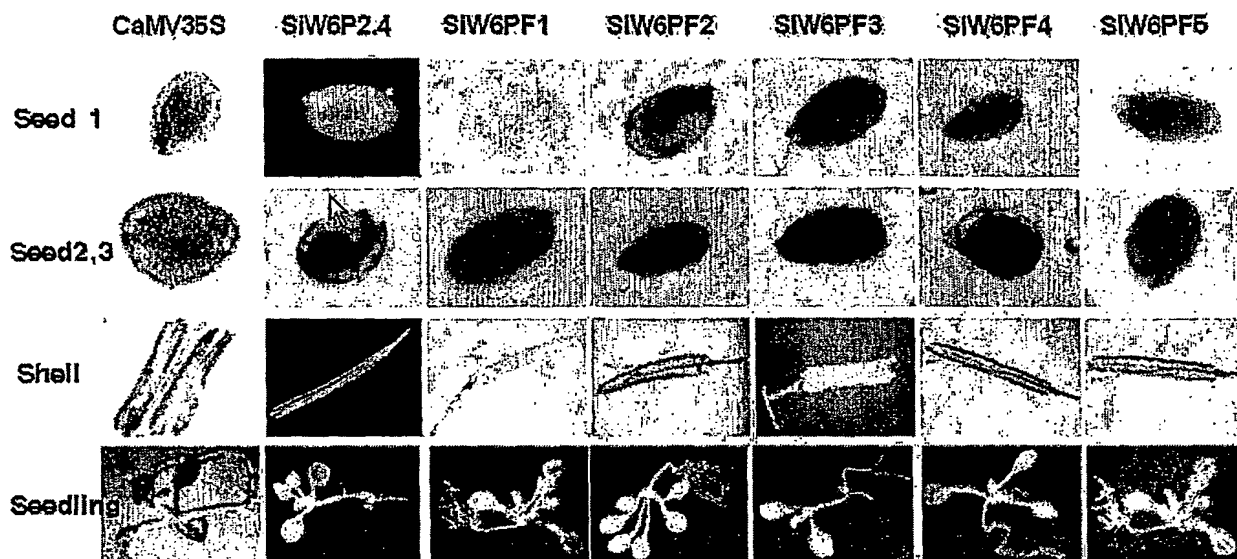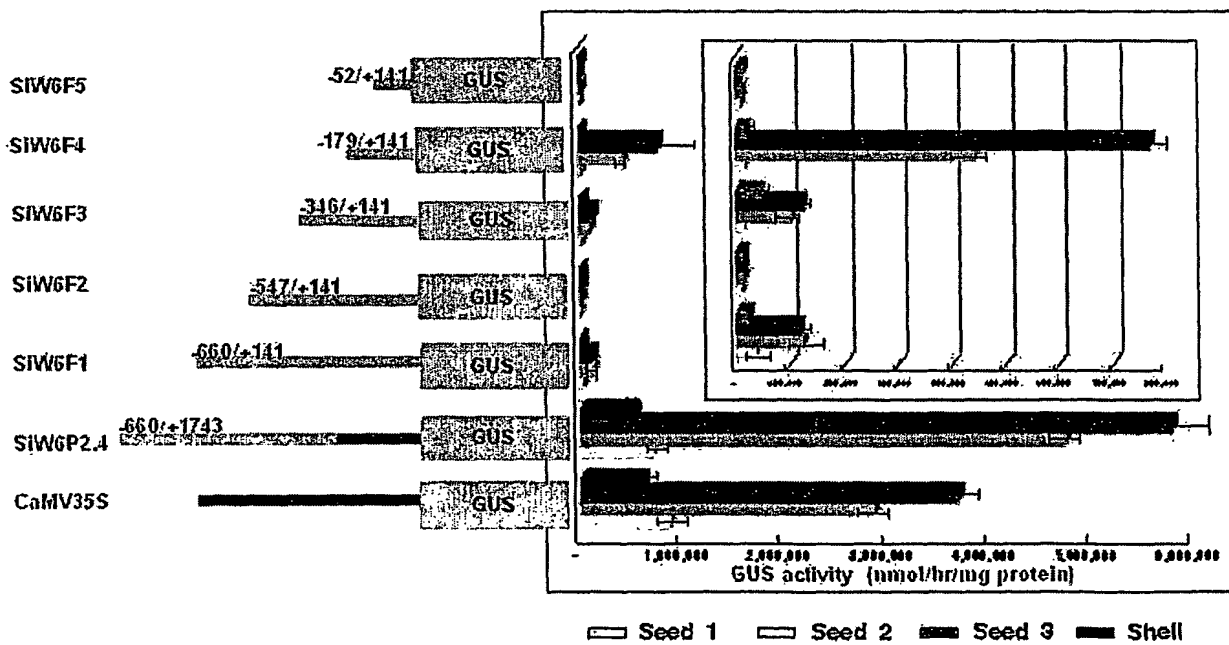

FIG. 10

FIG. 11

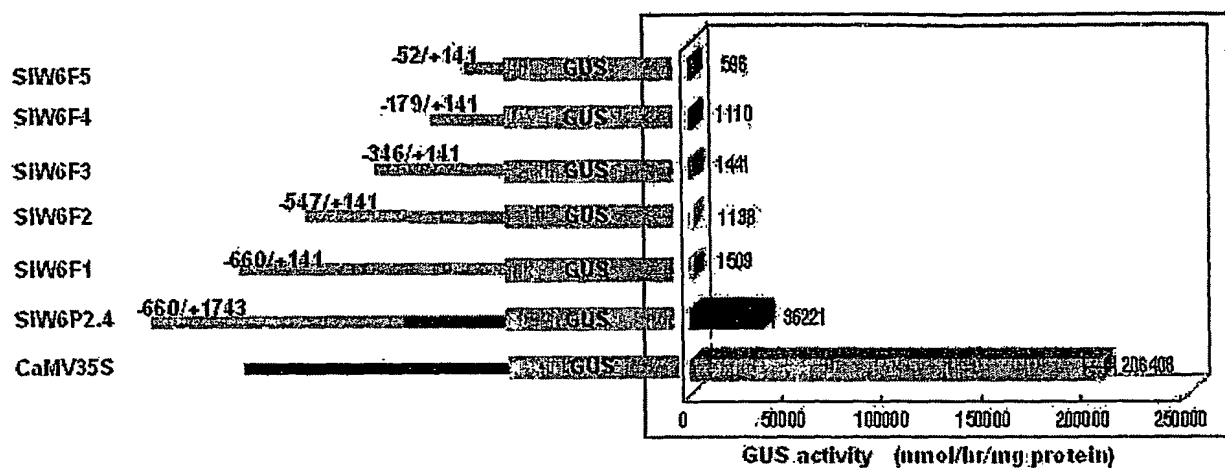## FIG. 12a

FIG. 12b

FIG. 13

```
-179  GGAATGTGCACACTCCATGTGGGCCAATGAGCGGATGACACGTGGCGGG
      CAACTTACCTCGTTACGTTGAGGCATGCATGAAAGGGGGATCTCTTGAGGTGGA
      GGGGTGGCGGCGGGGGTTGGGGGG  -53
```